aiwa

COMPACT DISC STEREO SYSTEM

Z-R500

OPERATING INSTRUCTIONS

87-MA7-903-01
970401AWY-P9

K

COMPACT disc DIGITAL AUDIO

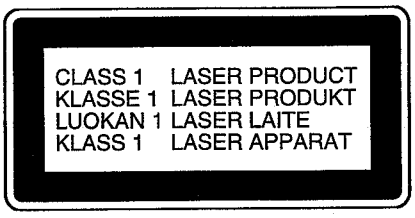
WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This compact disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the exterior.



CAUTION!

Invisible laser radiation when open and inter locks defeated. Avoid exposure to beam.

WARNING

This appliance is supplied with a fitted three pin mains plug. A 3 amp fuse is fitted in the plug.
Should the fuse need to be replaced, use a 3 amp fuse approved by ASTA or BSI to BS1362. When replacing the fuse, you must ensure that any removable fuse covers are correctly refitted.
If you should lose the fuse cover, please contact your nearest AIWA dealer.

DO NOT CUT OFF THE PLUG FROM THIS APPLIANCE. If the plug fitted is not suitable for the power points in your home, or the cable is too short to reach a power point, obtain an appropriate safety approved extension lead or adaptor. If in any doubt please consult a qualified electrician.

If the plug is cut off, remove the fuse and dispose of the plug immediately. **THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.**

If a new plug is to be fitted please ensure it contains a 3 amp fuse, otherwise the circuit should be protected by a 5 amp fuse at the distribution board.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE — NEUTRAL
BROWN — LIVE

As the colours of the wires in the mains lead of this appliance may not correspond with the colour markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked by the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked by the letter L or coloured RED.

DO NOT connect either the BLUE or BROWN wires in the mains lead to the earth terminal (marked with the letter E or by the earth symbol ⏚ or coloured GREEN or GREEN/YELLOW) of a three pin plug.

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PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

1 **Water and moisture** — Do not use this unit near water, such as near a bathtub, washbowl, swimming pool, or the like.
2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
3 **Mounting surface** — Place the unit on a flat, even surface.
4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
- Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
- Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.

5 **Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.
7 **Condensation** — Moisture may form on the CD pickup lens when:
- The unit is moved from a cold spot to a warm spot
- The heating system has just been turned on
- The unit is used in a very humid room
- The unit is cooled by an air conditioner

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
2 **AC power cord**
- When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
- Never handle the AC power plug with wet hands, as this could result in fire or shock.
- Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power socket.
- Avoid overloading AC power plugs and extension cords beyond their capacity, as this could result in fire or shock.

3 **When not in use** — Unplug the AC power cord from the AC power plug if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

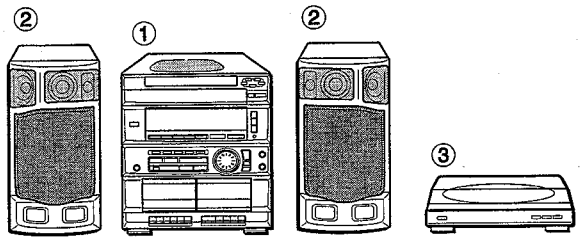
Have the units serviced by a qualified service technician if:
- The AC power cord or plug has been damaged
- Foreign objects or liquid have got inside the unit
- The unit has been exposed to rain or water
- The unit does not seem to operate normally
- The unit exhibits a marked change in performance
- The unit has been dropped, or the cabinet has been damaged

DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.

Welcome to the Aiwa Stereo System

Congratulations on your purchase of an Aiwa Stereo System. To optimize the performance of this system, please take the time to read through these Operating Instructions and become familiar with the operating procedures.

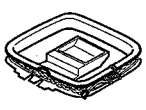
Check your system and accessories



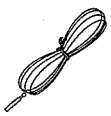
① CX-ZR500 Compact disc stereo cassette receiver
② SX-FZR500 (L, R) Front speakers
③ PX-E850 Stereo turntable

Remote control

MW/LW antenna



FM antenna



Operating Instructions, etc.

CONNECTIONS

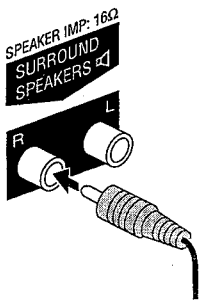
Before connecting the AC cord
The rated voltage of your unit shown on the rear panel is 230 V AC. Check that the rated voltage matches your local voltage.

IMPORTANT
Connect the speakers, antennas, and all optional equipment first. Then connect the AC cord in the end.

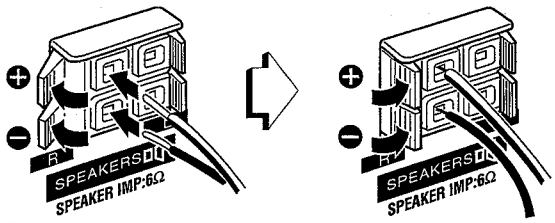
The speaker system
The speaker marked R is the right speaker, and the marked L is the left speaker.

1 Connect the right speaker to the main unit.

① Connect the surround speaker cord to the SURROUND SPEAKERS R terminal.



② Connect the speaker cord to the SPEAKERS R terminals.



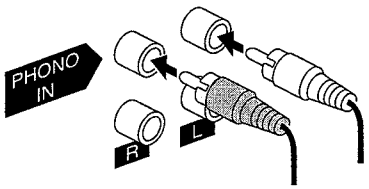
The speaker cord with the white stripe should be connected to the ⊕ terminal and the black cord to the ⊖ terminal.

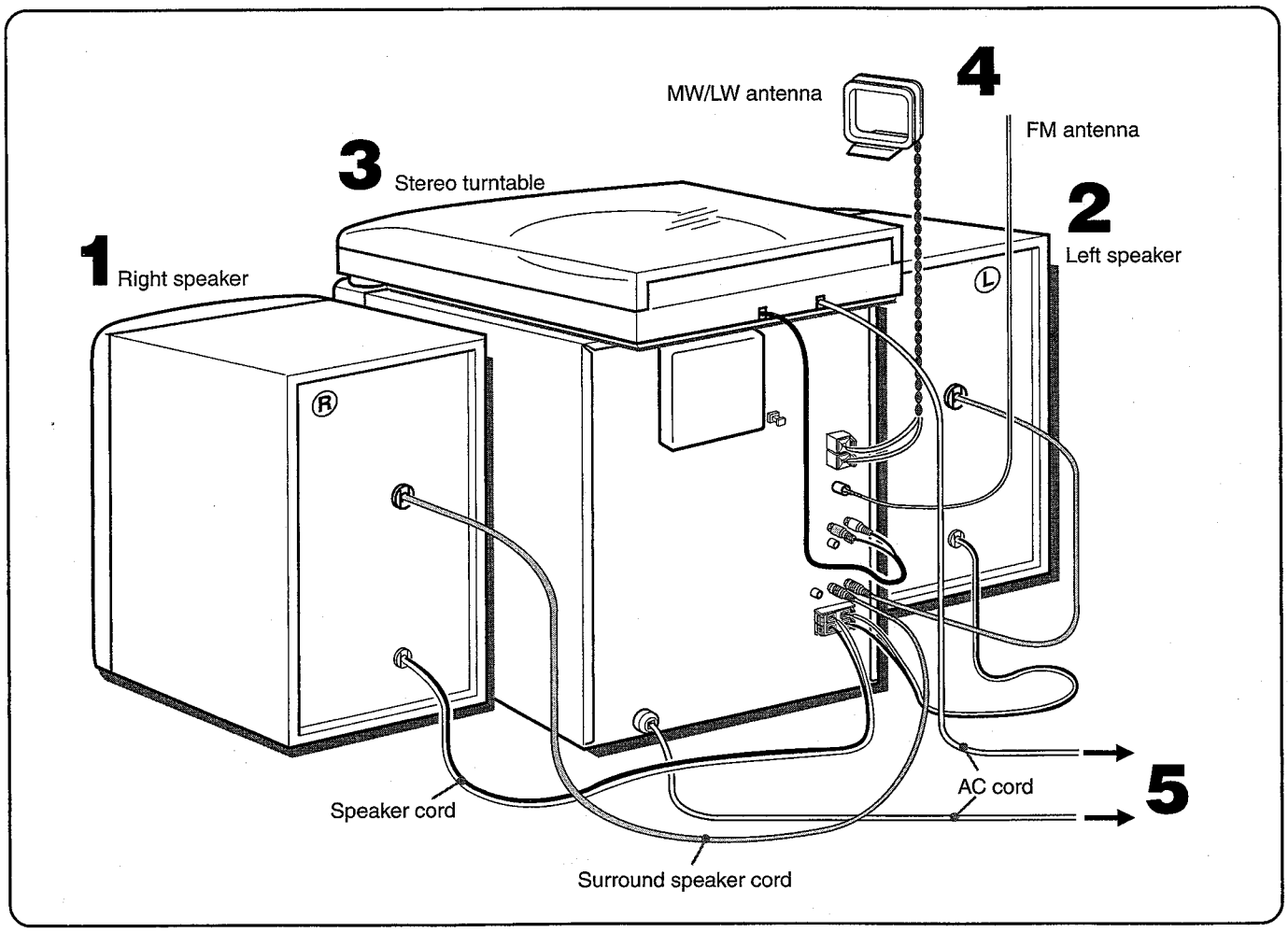
2 Connect the left speaker to the main unit.

Connect the surround speaker cord to the SURROUND SPEAKERS L terminal, and speaker cord to the SPEAKERS L terminals in the same manner as step 1.

3 Connect the stereo turntable to the main unit.

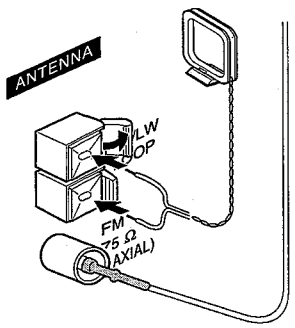
Connect the red plug to the PHONO IN R jack, and the white plug to the PHONO IN L jack.





4 Connect the supplied antennas.

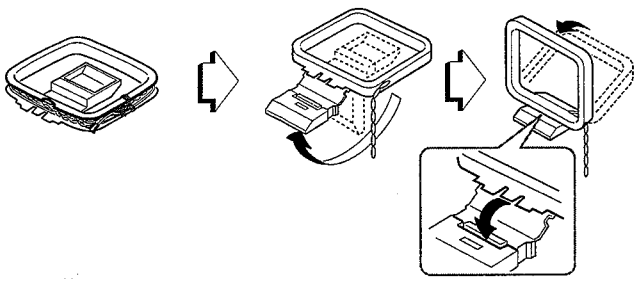
Connect the FM antenna to the FM 75 Ω terminal and the MW/LW antenna to the MW/LW LOOP terminals.



5 Connect the AC cords of the main unit and the stereo turntable to the AC outlets.

To stand the MW/LW antenna on a surface

Fix the claw to the slot.



To position the antennas

FM unipolar antenna:

Extend fully and position for the best possible reception.

This antenna is of an instant type, so the use of an outdoor antenna is recommended.

MW/LW loop antenna:

Position to find the best direction.

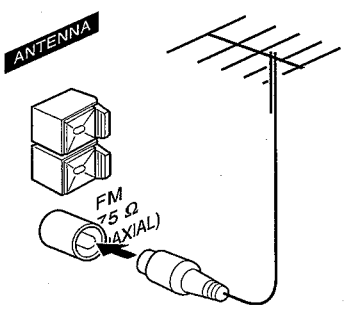
NOTE

- Be sure to connect the speaker cords correctly. Improper connections can cause short circuits in the SPEAKERS terminals.
- Do not leave objects generating magnetism near the speakers.
- Do not bring the FM antenna near metal objects or curtain rails.
- Do not bring the MW/LW antenna near other optional equipment, the stereo system itself, the AC cord or speaker cords, as noise will be picked up.
- Do not unwind the MW/LW antenna wire.

CONNECTING AN OUTDOOR ANTENNA

For better FM reception, use of an outdoor antenna is recommended.

Connect the outdoor antenna to the FM 75 Ω terminal.

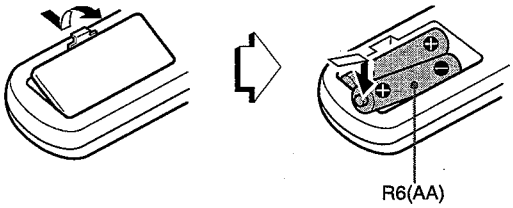


To connect other optional equipment → page 19.

THE REMOTE CONTROL

Inserting batteries

Detach the battery cover on the rear of the remote control and insert two R6 (size AA) batteries.



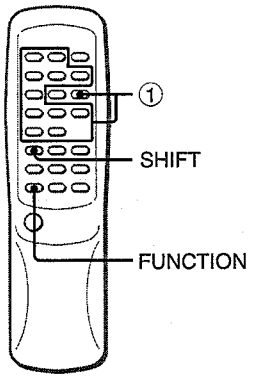
When to replace the batteries

The maximum operational distance between the remote control and the sensor on the main unit should be approximately 5 meters (16 feet). When this distance decreases, replace the batteries with new ones.

NOTE

If the unit is not going to be used for an extended period of time, remove the batteries to prevent possible electrolyte leakage.

USING THE REMOTE CONTROL



To use the SHIFT button on the remote control

Buttons ① have two different functions. One of these functions is indicated on the button, and the other on the plate above the button.

To use the function on the button, simply press the button.

To use the function on the plate above the button, press the button while pressing the SHIFT button.

To use the FUNCTION button on the remote control

The FUNCTION button substitutes for the function buttons (TAPE, TUNER/BAND, PHONO, VIDEO/AUX, CD) on the main unit.

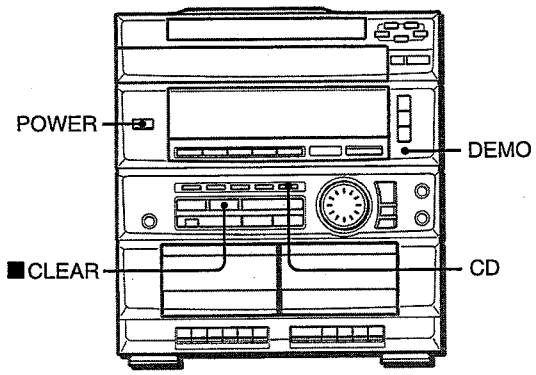
Each time the FUNCTION button is pressed, the next function is selected cyclically.

NOTE

The remote control may not operate correctly when:

- The line of sight between the remote control and the remote sensor inside the display window is exposed to intense light, such as direct sunlight
- Other remote controls are used nearby (those of a television, etc.)

BEFORE OPERATION



To turn the unit on
Press the POWER button.
The disc compartment may open and close to reset the unit.

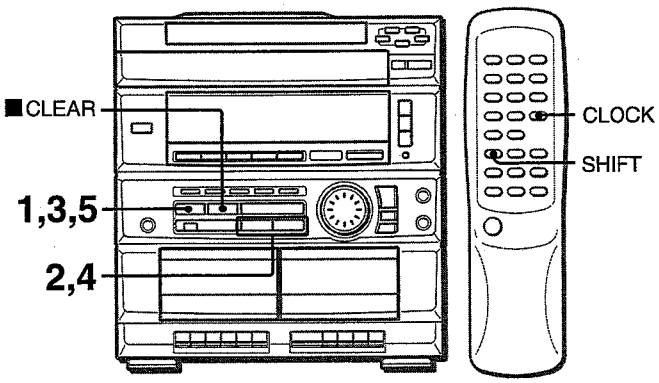
DEMO (Demonstration) mode
After connecting the AC cord, the display window demonstrates the functions of the unit. When the power is turned on, the DEMO display is overridden by the operation display. When the power is turned off, the DEMO mode is restored.

To cancel DEMO mode
Press the DEMO button. To re-activate, press again.

Flash window
The window on the top of the unit lights up or flashes while the unit is being powered on.
To turn off the light, press the ■CLEAR button on the main unit while pressing the CD button. To turn back on, repeat the above.
• This operation does not function during recording.

After use
Press the POWER button to turn off the power. The display changes to clock.

SETTING THE CLOCK



Set the time as follows while the power is off.

1 **Press the ▮▮ SET button.**
The hour flashes.

2 **Press the ⏮ DOWN or ⏭ UP button to designate the hour.**

3 **Press the ▮▮ SET button to set the hour.**
The hour stops flashing and the minute starts flashing.

4 **Press the ⏮ DOWN or ⏭ UP button to designate the minute.**

5 **Press the ▮▮ SET button to set the minute and complete setting.**
The minute stops flashing on the display and the clock starts from 00 second.

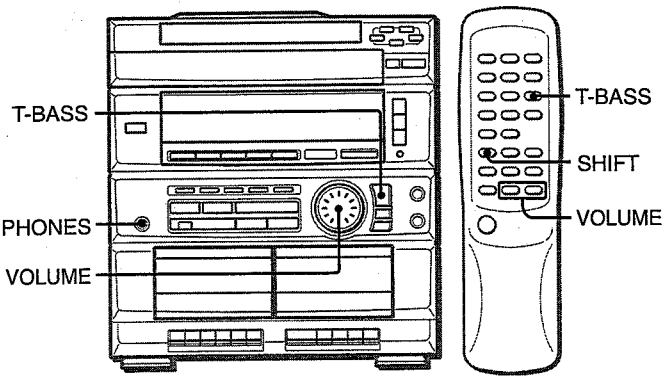
To correct the current time
Press the POWER button to turn the unit off. Press the ▮▮ SET button and carry out steps 1 to 5 above.

To display the current time
Press the CLOCK button while pressing the SHIFT button on the remote control. The clock is displayed for 4 seconds. However, the time cannot be displayed during recording.

To switch to the 24-hour standard
Press the CLOCK button while pressing the SHIFT button on the remote control and then press the ■CLEAR button within 4 seconds.
Repeat the same procedure to restore the 12-hour standard.

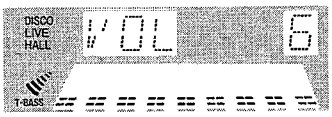
If the clock display flashes
This is caused by a power interruption. The current time needs to be reset.
If power is interrupted for more than approximately 24 hours, all settings stored in memory after purchase need to be reset.

SIMPLE AUDIO ADJUSTMENT



VOLUME CONTROL

Turn the VOLUME control on the main unit, clockwise to increase the volume and counter-clockwise to decrease it.
The volume level is shown on the display for 4 seconds. It can be set between 0 and MAX (31).



The volume remains memorized even after the power is turned off. However, if the power is turned off when the volume is set to more than 16, it is automatically set to 16 the next time the power is turned on.

To adjust with the remote control, press the VOLUME buttons.

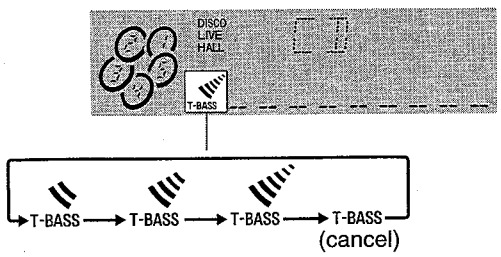
NOTE

- When the volume is set to 28 and above, a row of red bars flashes on top of the spectrum analyzer.
- The volume is automatically set to 10 after the unit was reset (See page 20).

SUPER T-BASS SYSTEM

The T-BASS system enhances the realism of low-frequency sound.

Press the T-BASS button on the main unit.
Each time it is pressed, the level changes. Select one of the three levels, or the off position to suit your preference.

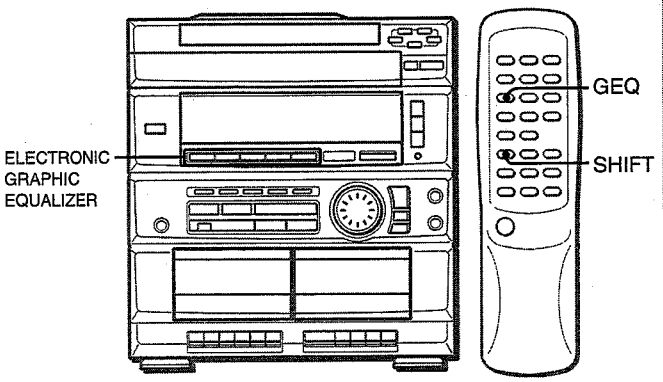


To select with the remote control
Press the T-BASS button while pressing the SHIFT button.

NOTE

Low frequency sound may be distorted when the T-BASS system is used for a disc or tape in which low frequency sound is originally emphasized. In this case, cancel the T-BASS system.

GRAPHIC EQUALIZER



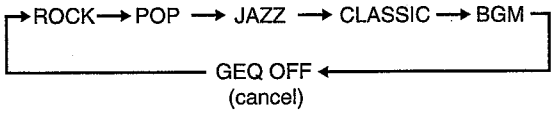
This unit provides the following five different equalization curves.

ROCK: Powerful sound emphasizing treble and bass
POP: More presence in the vocals and midrange
JAZZ: Suppressed vocals range appropriate for listening to rhythmical sources
CLASSIC: Enriched sound with heavy bass and fine treble
BGM: Calm tone with supressed bass and treble

Press one of the ELECTRONIC GRAPHIC EQUALIZER buttons.
The selected equalizer mode indicator flashes and that equalizer mode appears on the display.

To cancel the selected mode
Press the selected button again. The indicator stops flashing, and "GEQ OFF" is displayed.

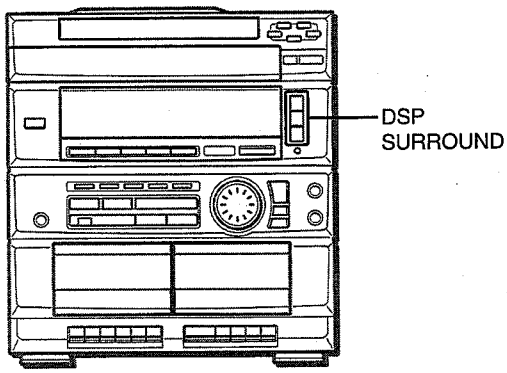
To select with the remote control
Press the GEQ button repeatedly while pressing the SHIFT button.The GEQ mode is displayed cyclically as follows.



Sound adjustment during recording
The output volume and tone of the speakers or headphones may be freely varied without affecting the level of the recording.

Using the headphones
Connect headphones to the PHONES jack with a stereo standard plug (ø6.3 mm, 1/4 inch).
No sound is output from the speakers while the headphones are plugged in.

SURROUND SYSTEM



The front surround system uses a DSP (Digital Signal Processor) to enhance the simulated surround sound effect for your listening pleasure. When you select the DSP SURROUND mode, the sound presence of a disco (DISCO), live music performance (LIVE), or concert hall (HALL) can be obtained.
In addition, the front surround speakers are located inside the cabinet of your speaker system and are directed outward at an angle of 35° and upward at an angle of 9° to provide an effective simulated surround sound effect without having to connect optional surround speakers.

Press one of the DSP SURROUND buttons.

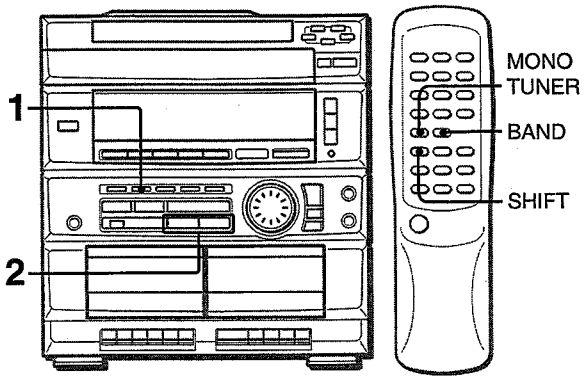
Equalization curves are selected automatically to match the DSP SURROUND modes and can also be selected manually or turned off to suit your preference.

When the music source is monaural
Select LIVE to obtain a simulated stereo effect. When DISCO or HALL is selected, no sound will be heard from the surround speakers.

To cancel the selected mode
Press the selected button again. SUR OFF is displayed.
While DSP SURROUND mode is off, no sound is heard from the surround speakers.

NOTE
When the MIC or ECHO function is turned on, the DSP SURROUND mode is automatically cancelled.

MANUAL TUNING

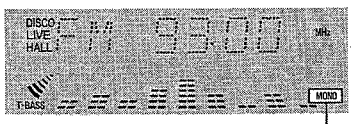


***1* Press the TUNER/BAND button repeatedly to select the desired band, FM, MW or LW.**
To select a band with the remote control
Press the BAND button while pressing the SHIFT button.

***2* Press the ⏮ DOWN or ⏭ UP button to select a station.**
Each time the button is pressed, the frequency changes.
When a station is received, "TUNE" is displayed for 2 seconds.
During FM stereo reception, ((◎)) is displayed.

To search for a station quickly (Auto Search)
Keep the ⏮ DOWN or ⏭ UP button pressed until the tuner starts searching for a station. After tuning in to a station, the search stops.
To stop the Auto Search manually, press the ⏮ DOWN or ⏭ UP button.
- The Auto Search may not stop at stations with very weak signals.

When an FM stereo broadcast contains noise
Press the MONO TUNER button while pressing the SHIFT button on the remote control to display "MONO".
Noise is reduced, although reception is monaural.

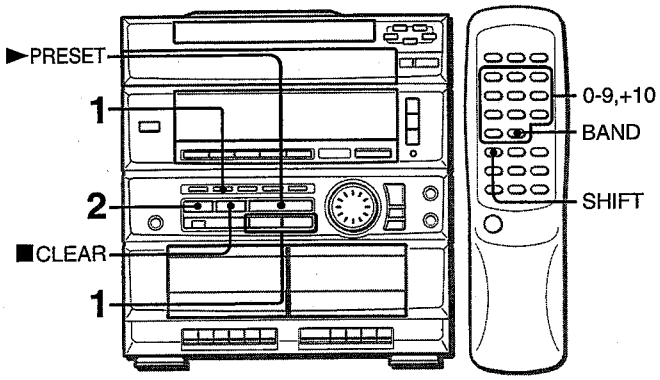


MONO

To restore stereo reception, press these buttons again so that "MONO" disappears.

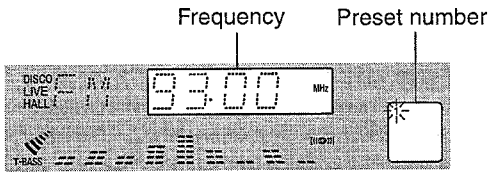
PRESETTING STATIONS

The unit can store a total of 32 preset stations. When a station is stored, a preset number is assigned to the station. Use the preset number to tune in to a preset station directly.



1 **Press the TUNER/BAND button to select a band, and press the ⏮ DOWN or ⏭ UP button to tune in to a station.**

2 **Press the ▮▮ SET button to store the station.**
A station is assigned a preset number, beginning from 1 in consecutive order for each band.



3 **Repeat steps 1 and 2.**

NOTE
Each band can only store a maximum of 20 preset stations. However, the next station will not be stored if a total of 32 preset stations have already been stored for all the bands.

PRESET NUMBER TUNING

Use the remote control to select the preset number directly.

1 **Press the BAND button while pressing the SHIFT button to select a band.**

2 **Press the numeric buttons to select a preset number.**
Example:
To select preset number 20, press the +10, +10 and 0 buttons.
To select preset number 15, press the +10 and 5 buttons.

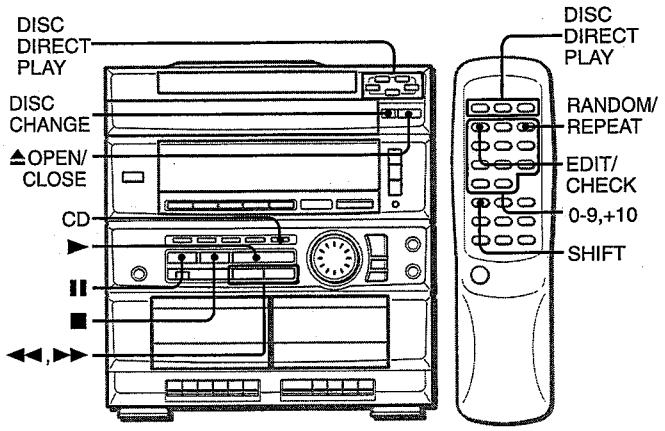
Selecting a preset number on the main unit
Press the TUNER/BAND button to select a band. Then, press the ► PRESET button repeatedly.
Each time the button is pressed, the next higher number is selected.

To clear a preset station
Select the preset number of the station to be cleared. Then, press the ■ CLEAR button, and press the ▮▮ SET button within 4 seconds.
The preset numbers of all other stations in the band with higher numbers are also decreased by one.

To change the MW tuning interval
The default setting of the MW tuning interval is 9 kHz/step. If you use this unit in an area where the frequency allocation system is 10 kHz/step, change the tuning interval.
With the unit turned on, press the POWER button while pressing the TUNER/BAND button.
To reset the interval, repeat this procedure.

NOTE
When the MW tuning interval is changed, all preset stations (see "PRESETTING STATIONS") are cleared. The preset stations have to be set again.

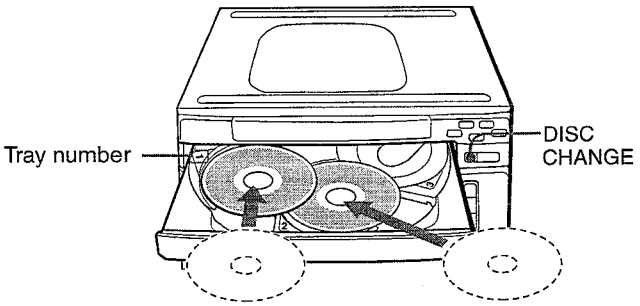
BASIC OPERATIONS



LOADING DISCS

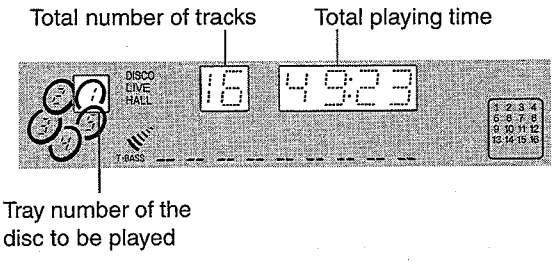
Press the CD button, then press the ≜ OPEN/ CLOSE button to open the disc compartment. Load disc(s) with the label side up.

To load one or two discs, place the discs(s) on tray(s) in the direction of the arrows as illustrated.



To load three to five discs, press the DISC CHANGE button to rotate the trays after placing two discs. Place the next disc on the empty tray. Each time the DISC CHANGE button is pressed, the trays rotate and one disc can be placed.

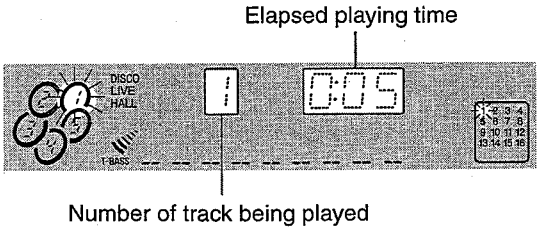
After placing the disc, press the ≜ OPEN/CLOSE button to close the disc compartment.
The display shows the information of the disc to be played.



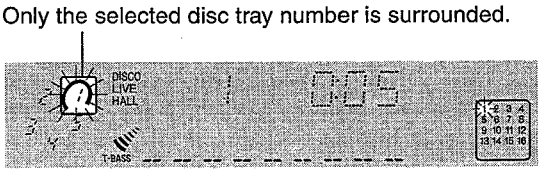
PLAYING DISCS

Load discs.

To play all discs in the disc compartment, press the ► button.
All discs are played once.



To play one disc only, press one of the DISC DIRECT PLAY buttons.
The disc with the selected tray number is played once.



To select with remote control
Press the DISC DIRECT PLAY 1, 2 or 3 button to select disc tray 1, 2 or 3. To select disc tray 4 or 5, press DISC DIRECT PLAY 4 or 5 button while pressing the SHIFT button.

To stop play, press the ■ button.
To pause play, press the II button. To resume play, press again.
To search for a particular point during playback, keep the ◄◄ or ►► button pressed and release the button at the desired point.
To skip to the beginning of a track during playback, press the ◄◄ or ►► button repeatedly.
To remove discs, press the ≜ OPEN/CLOSE button.
You can only remove the two discs that face you. When the disc to be removed does not face you, press the DISC CHANGE button repeatedly.

Selecting a track with the remote control

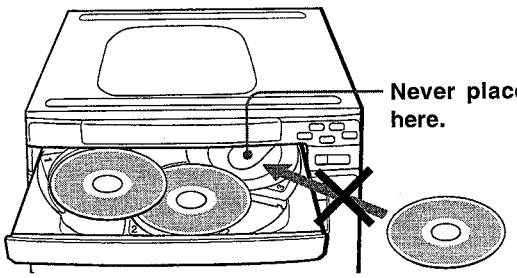
1 Press one of the DISC DIRECT PLAY buttons to select a disc.
To select disc 4 or 5, press DISC DIRECT PLAY 4 or 5 button while pressing the SHIFT button.
2 Press the numeric buttons and the +10 button to select a track.
Example:
To select the 25th track, press the +10, +10 and 5 buttons.
To select the 10th track, press the +10 and 0 buttons.
The selected track starts to play and continues to the end of that disc.

Replacing discs during play
While one disc is playing, the other discs can be replaced without interrupting play.

1 Press the DISC CHANGE button.
Two discs can be replaced.
2 Remove the discs and replace with other discs.
To replace the other two discs, press the DISC CHANGE button again.
3 Press the ≜ OPEN/CLOSE button to close the disc compartment.

To check the remaining time
During play, press the EDIT/CHECK button while pressing the SHIFT button on the remote control. The amount of time remaining until all tracks finish playing is displayed. To restore the play time display, repeat the above again.

NOTE
- When loading an 8-cm (3-inch) disc, make sure to put it onto the inner circle of the tray precisely. Otherwise, the disc may be damaged or the disc compartment will not open. If it does not open, please consult your Aiwa dealer for repair.
- Do not place more than one compact disc on one disc tray.
- Do not tilt the unit with discs loaded. Doing so may cause malfunctions.
- When transporting the unit, remove the discs from the trays.
- When replacing the discs during play, do not replace discs other than those facing you.
  If you place a disc on the empty right inner tray, and then press the ⏏OPEN/CLOSE button, "ERROR" is displayed and the disc compartment may not close. Remove the disc on that tray.



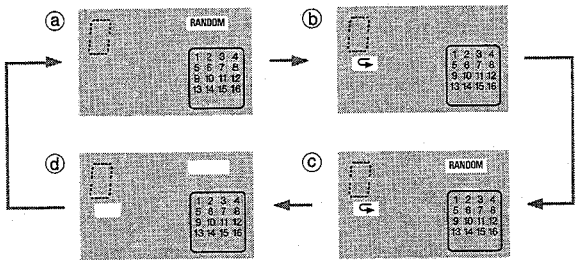
RANDOM /REPEAT PLAY

Use the remote control.

RANDOM play
All the tracks on the selected disc or on all the discs can be played randomly.

REPEAT play
All the tracks on the selected disc or on all the discs can be played repeatedly.

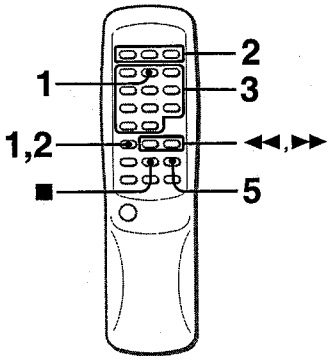
Press the RANDOM/REPEAT button while pressing the SHIFT button.
Each time they are pressed, the function can be selected cyclically.
ⓐ RANDOM play
ⓑ REPEAT play
ⓒ RANDOM/REPEAT play
ⓓ Cancel



NOTE
- Even if the ◄◄ button is pressed during RANDOM play, a previously played track cannot be skipped. The unit returns to the beginning of the current track only.
- Direct selection of the tracks with the numeric buttons is not possible during RANDOM play.

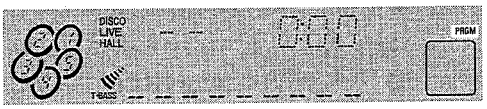
PROGRAMMED PLAY

Up to 30 tracks can be programmed from any of the inserted discs.



Use the remote control.

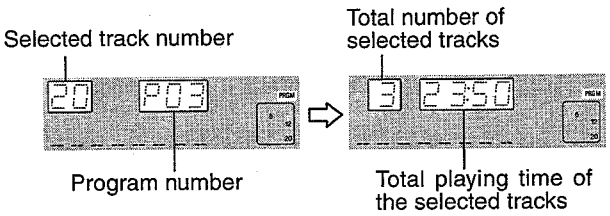
***1* Press the PRGM button twice while pressing the SHIFT button in stop mode.**
The PRGM indicator is displayed.



- When the PRGM button is pressed once in step 1, the unit enters the KARAOKE PROGRAMS (page 16).

***2* Press one of the DISC DIRECT PLAY buttons to select a disc.**
To select disc 4 or 5, press DISC DIRECT PLAY 4 or 5 button while pressing the SHIFT button.
The selected disc is indicated in red on the display.
Go to the next step when the tray stops rotating.

***3* Press the numeric buttons and the +10 button to program a track.**
Example:
To select the 25th track, press the +10, +10 and 5 buttons.
To select the 10th track, press the +10 and 0 buttons.



***4* Repeat steps 2 and 3 to program other tracks.**

***5* Press the ► button to start play.**

To check the program
Each time the ◄◄ or ►► button is pressed in stop mode, a disc number, track number, and program number will be displayed.

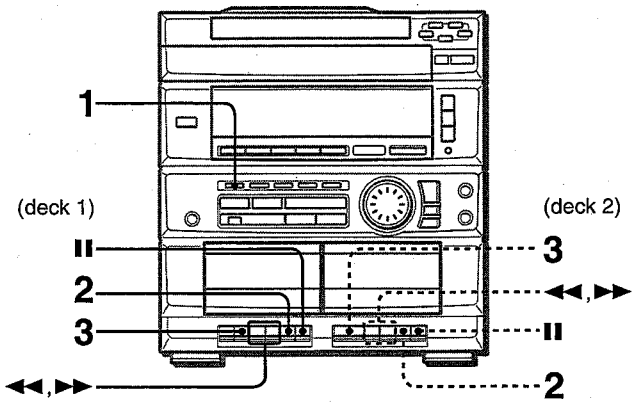
To clear the program
Press the ■ CLEAR button in stop mode.

To add tracks to the program
Before playing, repeat steps 2 and 3. The track will be programmed after the last programmed track.

To change the programmed tracks
Clear the program and repeat all the steps again.

NOTE
- RANDOM play is not performed during programmed play.
- During the programmed play, the EDIT/CHECK, DISC CHANGE, DISC DIRECT PLAY and numeric buttons do not function.

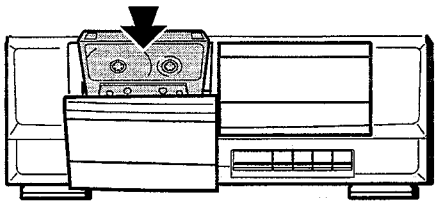
BASIC OPERATIONS



Usable tapes
Use Type I(normal), Type II(high/CrO_2) or Type IV(metal) tapes for playback.

1 **Press the TAPE button.**

2 **Press the ■/⏏ button to open the cassette holder and insert a tape with exposed side downwards. Push the cassette holder to close it.**



3 **Press the ► button to start playback.**
Only the side facing you can be played back.

To stop playback, press the ■/⏏ button.
To pause, press the II button.
To resume play, press it again.
To fast forward or rewind, press the ►► or ◄◄ button in stop mode. Then press the ■/⏏ button to stop winding.

When both deck 1 and deck 2 are set in the playback mode
Deck 2 is heard.

CONTINUOUS PLAY

After the tape in deck 2 has been played back on one side and stops, the tape in deck 1 will start to play without interruption.

1 **Insert tapes into deck 1 and 2.**

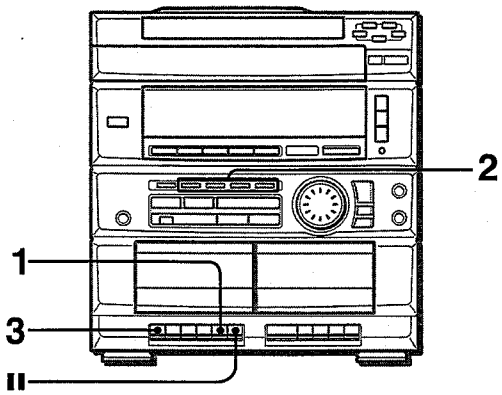
2 **Press the TAPE button.**

3 **Press the ► button on deck 2 to start playback.**

4 **Press the II button and the ► button on deck 1.**
As soon as the tape in deck 2 ends and stops, the pause mode for deck 1 is released and playback starts automatically.

BASIC RECORDING

This section explains how to record from the tuner, CD player, or external equipment.



Preparation
- Wind up the tape to the point recording starts.
- Note that recording is done on only one side of the tape.
- Use Type I (normal) or Type II(high/CrO_2) tapes for recording.

1 **Insert the tape to be recorded on into deck 1 and push the cassette holder to close it.**
Insert the tape with the side to be recorded facing out from the unit and the exposed side downwards.

2 **Get ready for the source to be recorded.**
To record from a CD
Press the CD button and load the disc(s).
To record from a radio broadcast
Press the TUNER/BAND button and tune in to a station.
To record from the connected source
Press the PHONO or VIDEO/AUX button and play it.

3 **Press the ● button to start recording.**
The ► button is depressed simultaneously.
When recording from a CD, playing and recording start simultaneously.

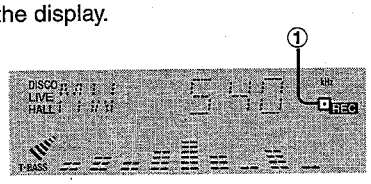
To stop recording, press the ■/⏏ button on deck 1.
To pause recording, press the II button on deck 1.
To resume recording, press it again.

To record selected tracks of the CD
Before pressing the ● button, program the tracks (see page 10).

To record part of the CD
When the ● button is pressed, recording always starts from the first track. To start in the middle of a track, play the CD first and press the IISET button for CD at the point you wish to start recording from. Then, press the ● button. The pause mode for CD button is released automatically and recording starts.

NOTE

- The ● button cannot be depressed if the erasure prevention tab on the side of the tape to be recorded is broken off.
- If squealing or beating sounds occur when recording an MW or LW broadcast, press the MONO TUNER button while pressing the SHIFT button on the remote control, so as to eliminate the noise.
  Each time these buttons are pressed, the dot ① is turned on and off on the display.



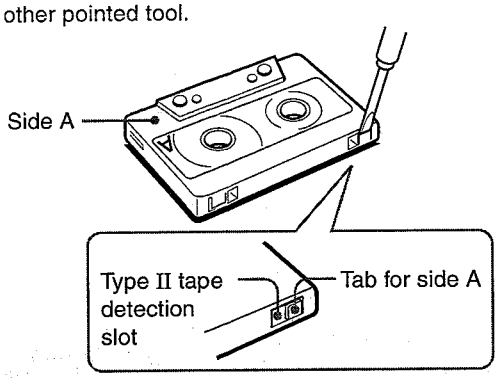
To erase a recording

A previous recording is erased when a new recording is made on that part of that tape.
Make sure the microphone is not connected to this unit.

1 Insert the tape you want to erase into deck 1.
2 Press the TAPE button and stop all the tape operation in deck 2.
3 Wind up the tape to the point where the erasure is to be started.
4 Press the ● button on deck 1 to start erasure.

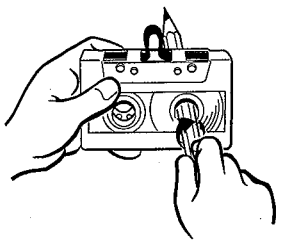
About cassette tapes

- **To prevent accidental erasure,** break off the plastic tabs on the cassette tape after recording with a screwdriver or other pointed tool.



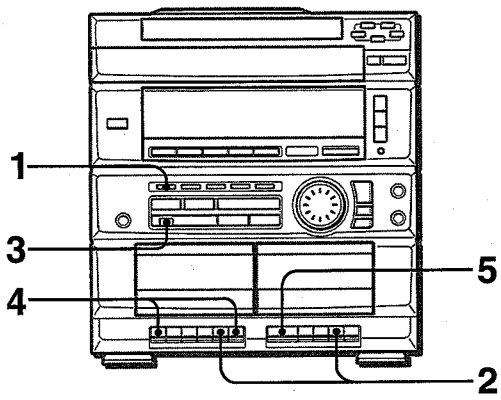
To record on the tape again, cover the tab openings with adhesive tape, etc. (On Type II (high/CrO_2) tapes, take care not to cover the Type II (high/CrO_2) tape detection slot.)

- **120-minute or longer tapes** are extremely thin and easily deformed or damaged. They are not recommended.
- **Take up any slack** in the tape with a pencil or similar tool before use. Slack tape may break or jam in the mechanism.



COPYRIGHT
Please check the laws on copyright relating to recordings from discs, radio or external tape for the country in which the machine is being used.

RECORDING FROM TAPE TO TAPE



Preparation

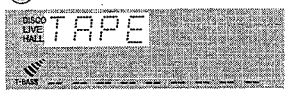
- Wind up the tapes to the point to be played back and where recording starts.
- Note that recording is done on only one side of the tape.
- Use Type I (normal) or Type II(high/CrO_2) tapes for recording.

***1* Press the TAPE button.**

***2* Insert the original tape into deck 2 and the tape to be recorded on into deck 1.**
Insert each tape with the side to be played back or recorded facing out from the unit.

***3* Select dubbing speed by pressing the DUBBING SPEED button repeatedly.**
ⓐ For dubbing at high speed: "HIGH-DUB" is displayed.
ⓑ For dubbing at normal speed: "TAPE" is displayed.

ⓐ

ⓑ


- While "HIGH-DUB" is displayed, the ►, ◄◄ and ►► buttons do not operate.

***4* Press the ❚❚ button on deck 1 then press the ● button.**
The ► button on deck 1 is depressed simultaneously, and **REC** is displayed. Deck 1 enters recording pause mode.

***5* Press the ► button on deck 2 to start recording.**
The ❚❚ button on deck 1 is released.
Playing and recording start simultaneously.

To stop recording

Press the ■/⏏ buttons on both deck 1 and 2.

To cancel high-speed dubbing before recording

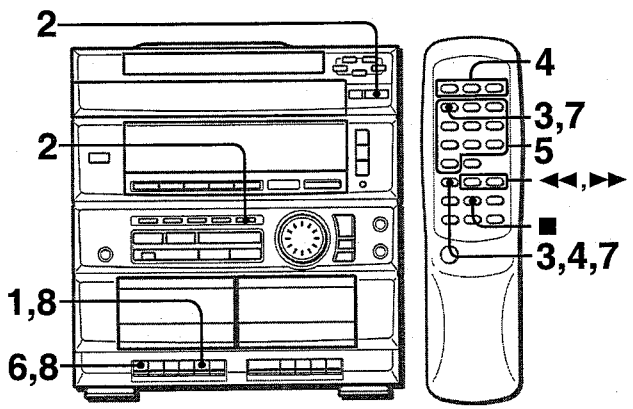
Press the DUBBING SPEED button again.

NOTE

- When the high-speed dubbing mode is selected by pressing the DUBBING SPEED button, only the ● button functions among the tape operation buttons.
- Noise may be recorded if this system is too close to a TV, VCR or radio. If this happens, move this system away from the TV, VCR or radio.

AI EDIT RECORDING

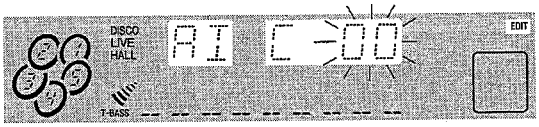
The AI edit function enables CD recording without worrying about tape length and track length. When a CD is inserted, the unit automatically calculates track lengths. If necessary, the order of tracks is rearranged so that no track is cut short.
(AI: Artificial Intelligence)



1 Insert the tape to be recorded on into deck 1, and wind up to the beginning of the front side.
Insert the tape with the side to be recorded first facing out from the unit, and wind up the tape with the ◀◀ button.

2 Press the CD button and load the disc(s).

3 Press the EDIT/CHECK button once while pressing the SHIFT button on the remote control.
"AI" and EDIT are displayed.

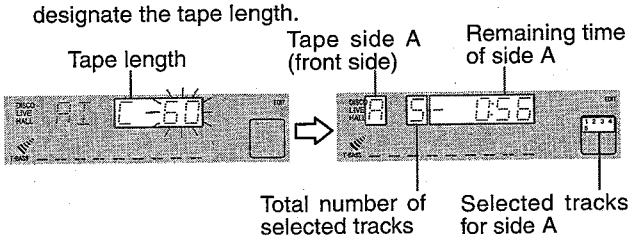


Each time these are pressed, the display changes as follows:

AI EDIT ⟶ PRGM EDIT

4 Press one of the DISC DIRECT PLAY buttons to select a disc.
To select disc 4 or 5 from the remote control, press DISC DIRECT PLAY 4 or 5 button while pressing the SHIFT button.

5 Press the numeric buttons on the remote control to designate the tape length.
10 to 99 minutes can be specified.
Example: When using a 60-minute tape, press the 6 and 0 buttons.
In a few seconds, the microcomputer determines the tracks to be recorded on each side of the tape.
• The I◀◀DOWN and ▶▶IUP buttons are also available to designate the tape length.



6 Press the ● button on deck 1 to start recording on the first side.
REC flashes for 10 seconds, and then CD play and recording of edited tracks for the first side start simultaneously. When the end of the tape is reached, deck 1 enters the recording stop mode. After entering the recording stop mode, go to step 7.

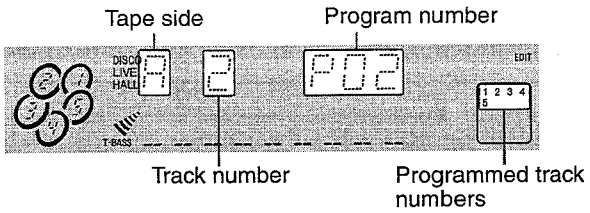
7 Press the EDIT/CHECK button while pressing the SHIFT button on the remote control to prepare for the second side recording.
After confirming B on the display, go to step 8.

8 Turn over the tape in deck 1 and press the ● button to start recording on the second side.

To stop recording
Press the ■/⏏ button on deck 1.
Recording and CD play stop simultaneously.

To clear the edited program
Press the ■CLEAR button twice in the stop mode so that EDIT disappears on the display, or press the ⏏OPEN/CLOSE button.

To check the order of the programmed track numbers
Before recording, press EDIT/CHECK while pressing the SHIFT button to select side A or B, and press the I◀◀DOWN or ▶▶IUP button repeatedly.
Each time it is pressed, the track number and program number are displayed in order.



To add tracks from other discs to the edited program
If there is any time remaining on the tape after step 5, you can add tracks from other discs in the compartment before recording starts.

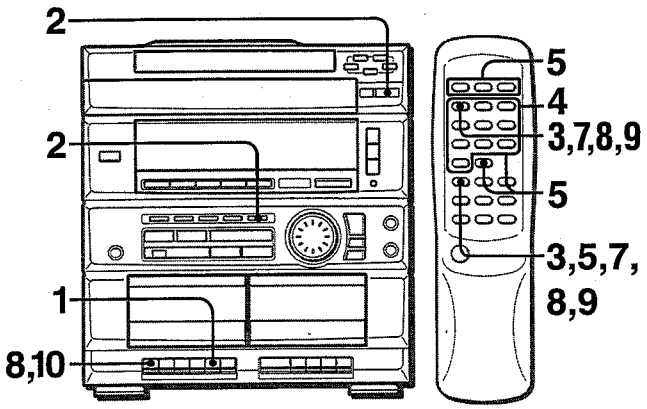
1 Press the EDIT/CHECK button while pressing the SHIFT button to select side A or B.
2 Press one of the DISC DIRECT PLAY buttons to select a disc.
To select disc 4 or 5 from the remote control, press DISC DIRECT PLAY 4 or 5 button while pressing the SHIFT button.
3 Press the numeric buttons to select tracks.
If the playing time of a selected track is longer than the tape remaining time, it is not added.
4 Repeat steps 2 and 3 for adding more tracks.

Time on cassette tapes and editing time
The actual cassette recording time is usually a little longer than the specified recording time printed on the label. This unit can program tracks to use the extra time. When the total recording time is a little longer than the tape's specified recording time after editing, the display shows the extra time (without a minus mark), instead of the time remaining on the tape (with the minus mark).

NOTE
The edit function cannot be used with discs containing 31 tracks or more.

PROGRAMMED EDIT RECORDING

The programmed edit function enables CD recording while checking the remaining time on each side of the tape as the tracks are programmed.

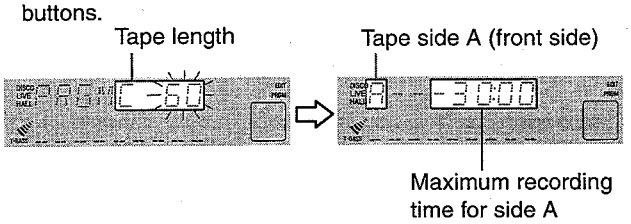


1 Insert the tape into deck 1 and wind up to the beginning of the front side.
Insert the tape with the side to be recorded first facing out from the unit, and wind up the tape with the ◀◀ button.

2 Press the CD button and load the disc(s).

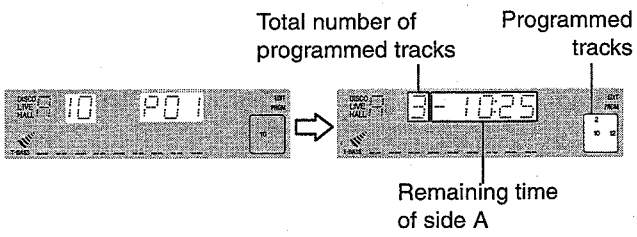
3 Press the EDIT/CHECK button twice while pressing the SHIFT button on the remote control.
PRGM and EDIT are displayed.

4 Press the numeric buttons on the remote control to designate the tape length.
10 to 99 minutes can be specified.
Example: When using a 60-minute tape, press the 6 and 0 buttons.



5 Press one of the DISC DIRECT PLAY buttons to select a disc and press the numeric buttons to program a track.
To select disc 4 or 5 from the remote control, press the DISC DIRECT PLAY 4 or 5 button while pressing the SHIFT button.
Example: To select the 10th track of disc 2, press DISC DIRECT PLAY 2 and the numeric buttons + 10 and 0.

6 Repeat step 5 for the rest of the tracks for side A.
A track whose playing time is longer than the remaining time cannot be programmed.



7 Press the EDIT/CHECK button while pressing the SHIFT button to select side B and program the tracks for side B.
After confirming B on the display, repeat step 5.

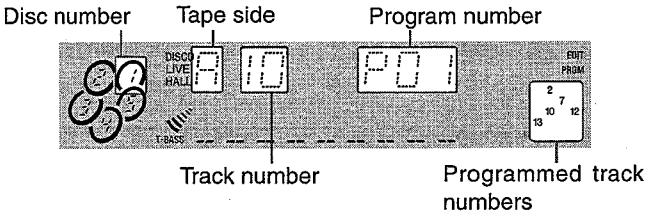
8 Press the EDIT/CHECK button while pressing the SHIFT button to select side A and press the ● button on deck 1 to start recording.
REC flashes for 10 seconds, and then CD play and recording of edited tracks for the first side start simultaneously. When the end of the tape is reached, deck 1 enters the recording stop mode. After entering the recording stop mode, go to step 9.

9 Press the EDIT/CHECK button while pressing the SHIFT button on the remote control for recording of the second side.
After confirming B on the display, go to step 10.

10 Turn over the tape in deck 1 and press the ● button.

To stop recording
Press the ■/⏏ button on deck 1. Recording and CD play stop simultaneously.

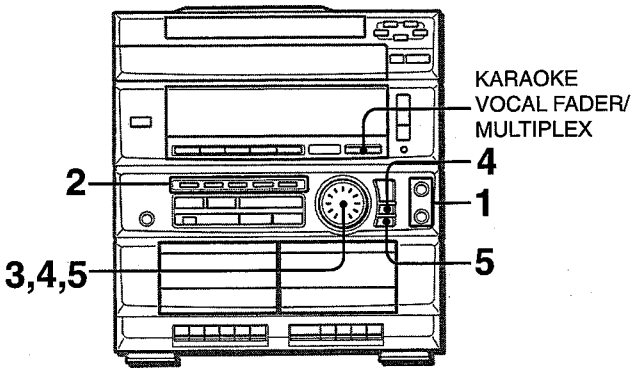
To check the order of the programmed track numbers
Before recording, press the EDIT/CHECK button while pressing the SHIFT button to select side A or B, and press the ⏮DOWN or ⏭UP button repeatedly.



To change the program of each side
Press the EDIT/CHECK button while pressing the SHIFT button to select side A or B, and press the ■ CLEAR button to clear the program of the selected side. Then program tracks again.

To clear the edited program
Press the ■CLEAR button twice in stop mode so that EDIT disappears on the display.

MICROPHONE MIXING



Two microphones (not supplied) can be connected to this unit, allowing you to sing along to music sources.
Use microphones with standard plugs (ø6.3 mm, 1/4 inch).

Before connecting a microphone
Press the MIC button and turn the VOLUME control counterclockwise until "MIC OFF" is displayed.

1 **Connect your microphones to the MIC 1 and MIC 2 jacks.**

2 **Press one of the function buttons to select the source to be mixed, and play the source.**

3 **Adjust the volume and tone of the source.**

4 **Press the MIC button and turn the VOLUME control within 4 seconds to adjust the microphone volume.**
OFF, 1 to 6 and MAX (maximum) can be selected.
The volume of both microphones is adjusted simultaneously.

5 **Press the ECHO button and turn the VOLUME control within 4 seconds to adjust the echo level.**
OFF, 1 to 6 and MAX (maximum) can be selected.
The echo level of both microphones is adjusted simultaneously.

To select the echo delay time
Select the echo delay time to suit your preference.
After adjusting the echo level, hold down the ECHO button until "ECHO-L" (long delay) or "ECHO-M" (middle delay) is displayed.

To record microphone sound mixed with source sound
Follow the procedure for recording from the sound source (see page 11). Microphone mixing recording cannot be used on high speed dubbing.

When not using the microphones
Press the MIC button and turn the VOLUME control counterclockwise until "MIC OFF" is displayed. Remove the microphones from the MIC jacks.

NOTE

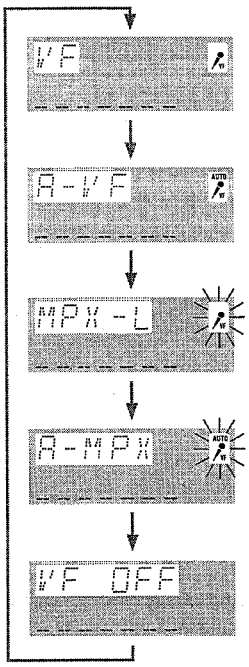
- The MIC and ECHO level is automatically set to OFF position when another function button or one of the DSP SURROUND button is pressed, the power is turned off, or the AC cord is disconnected.
- When the microphone volume or the echo level is turned on, the surround system is automatically cancelled.
- If a microphone is held too near the speakers, a howling sound may be produced. In this case, hold the microphone away from the speakers, or decrease the microphone volume.
- If sound through the microphone is extremely loud, it may be distorted. In this case, lower the microphone volume.

Recommended microphone
The use of unidirectional type microphone is recommended to prevent howling. Contact your local Aiwa dealer for details.

VOCAL FADER/MULTIPLEX FUNCTIONS

This unit can use discs or tapes as Karaoke sources.

Press the VOCAL FADER/MULTIPLEX button repeatedly to select the vocal fader or multiplex function.
Use the vocal fader function for ordinary discs or tapes.
Use the multiplex function for multi audio discs or tapes.
Each time the VOCAL FADER/MULTIPLEX button is pressed, one of these functions is selected cyclically.



Vocal Fader
The singer's voice becomes softer than the accompaniment.

Auto Vocal Fader*1
The singer's voice becomes softer only while there is audio input through a microphone.

Multiplex*2
The sound on the left (or right) channel is heard from both speakers, and the sound on the right (or left) channel is muted.

Auto Multiplex*1
The sound on the left (or right) channel is heard from both speakers, and the sound on the right (or left) channel is muted only while there is audio input through a microphone.

Cancel

***1 To change the time lag setting of the Auto Vocal Fader or Auto Multiplex function**
When Auto Vocal Fader or Auto Multiplex is selected, "A-VF" or "A-MPX" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, hold down the VOCAL FADER/MULTIPLEX button until the desired time lag setting, SLOW or FAST, is selected.

SLOW
Fade out of original singer's voice returns to the normal level if there is no audio input from the microphone within 2 seconds.

FAST
Fade out of original singer's voice returns to the normal level if there is no audio input from the microphone within 0.5 seconds.

When the power is turned off or the source is changed, the Auto vocal fader and Auto multiplex restore to SLOW.

***2 To change the muted channel of the Multiplex function**

When Multiplex is selected, "MPX-L" is displayed for 3 seconds and changes to the selected function name. After the selected function name is displayed, hold down the VOCAL FADER/ MULTIPLEX button until the channel to be output from both speakers, MPX-L or MPX-R, is selected.

MPX-L

The sound on the left channel is heard from both speakers and the sound on the right channel is muted.

MPX-R

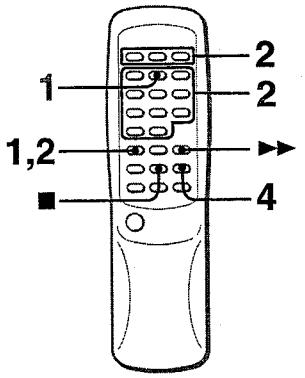
The sound on the right channel is heard from both speakers and the sound on the left channel is muted.

When the power is turned off or the source is changed, the Multiplex restores to MPX-L.

NOTE

- The VOCAL FADER functions may not operate correctly with the following kinds of CDs or tapes.
  - Those with monaural sound
  - Those recorded with strong echoes
  - Those with the vocal part recorded on the right or left side of the sound width
- While the VOCAL FADER function is on, the sound is output as monaural.

KARAOKE PROGRAMS

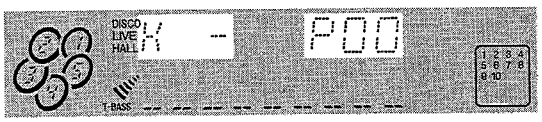


Before or during CD play, you can reserve up to 15 tracks to be played after the current track. Each reservation is cleared when it finishes playing.

Use the remote control.

***1* Press the PRGM button <u>once</u> while pressing the SHIFT button.**

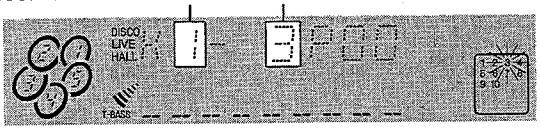
"CD KARAOKE" scrolls on the display.



***2* Press one of the DISC DIRECT PLAY buttons to select a disc and the numeric buttons to select a track.**

To select disc 4 or 5, press DISC DIRECT PLAY 4 or 5 button while pressing the SHIFT button.

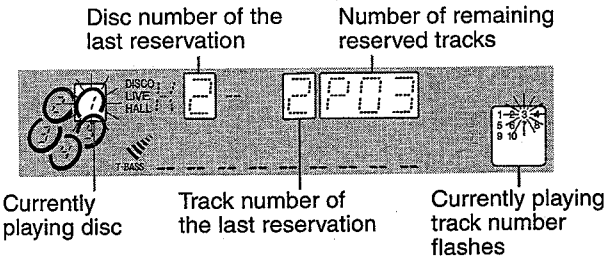
Reserved disc number Reserved track number



***3* Repeat steps 2 to reserve other tracks.**

***4* Press the ►PRESET button to start play.**

After a track is played, it is cleared from the program. Another track can be reserved in place of the cleared track.



To add a reservation during play

Repeat step 2.

To check a reserved tracks

Press the EDIT/CHECK button repeatedly while pressing the SHIFT button. Each time it is pressed, the disc number and track number are displayed in the reserved order.

To stop play

Press the ■ button. Press the ► button to start again.

To skip a track

Press the ►► button. The skipped track is cleared from the program.

To clear all the reservations

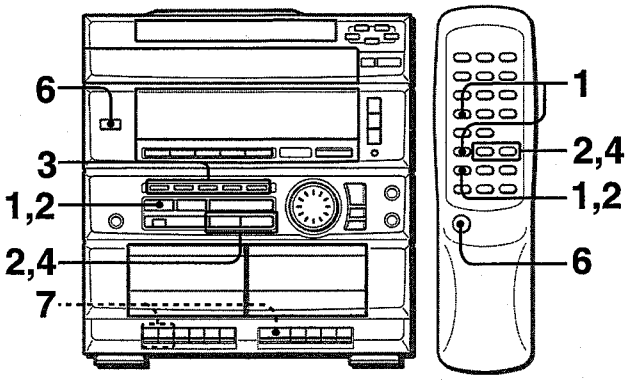
Press the ►► button repeatedly until "K - P00" is displayed.

Press it once more to cancel the Karaoke programs. The display returns to that of CD play.

NOTE

- If the reserved track number does not exist on the selected disc or there is no disc on the reserved disc tray, the unit stops playing and the display flashes.
  In this case, press the ►► button to skip the error track. Then press the ► button to start play with the next reserved track.
- When the PRGM button is pressed repeatedly in step 1, PRGM is displayed and the unit enters CD program play mode (page 10).
  To cancel program play, press the ■ CLEAR button.

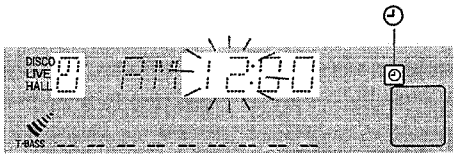
SETTING THE TIMER



The unit can be turned on at a specified time every day with the built-in timer. .

Preparation
Make sure the clock is set correctly. (See page 5.)

1 **Press the TIMER button once while pressing the SHIFT button on the remote control to display ◴, and press the ▮▮ SET button within 4 seconds.**
◴ is displayed, and the hour flashes.

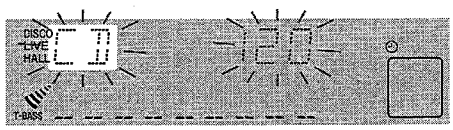


NOTE
If you do not press the ▮▮ SET button within 4 seconds, another operation may start.

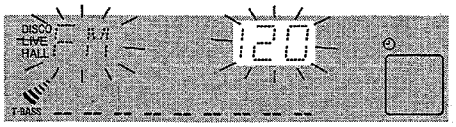
2 **Designate the hour of the timer-on time by pressing the ⏮ DOWN or ⏭ UP button, and the ▮▮ SET button. Repeat to designate the minute of the timer-on time.**

After you designate the timer-on time, one of the source names flashes on the display for 4 seconds.

3 **Within 4 seconds, press one of the function buttons to select a source.**
The selected source name flashes for 4 seconds.
- If this step is not completed within 4 seconds, repeat from step 1.
- If the TUNER/BAND button is pressed, the band cannot be selected in this step.



4 **Within 4 seconds, select the duration for the timer-activated period with the ⏮ DOWN or ⏭ UP button.**



The duration for the timer-activated period can be set between 5 and 240 minutes in 5-minute steps.
- If this step is not completed within 4 seconds, repeat from step 1.

5 **Prepare the source.**
To listen to CD, load the disc(s) to be played.
To listen to tape playback, insert a tape into the deck.
To listen to a radio broadcast or record it, tune in to a station.
When recording from the tuner, insert the tape to be recorded on into deck 1.

6 **Press the POWER button to turn the unit off after adjusting the volume and tone.**
◴ remains on the display after the power is turned off (timer standby mode).

7 **Get ready for the TAPE function or the timer recording.**
To listen to the tape, press the ► button.
To record the source, press the ● button on deck 1.

When the timer-on time is reached, the unit turns on and begins play or record with the selected source.

The timer recording period and tape length
When the length of the tape to be recorded is shorter than the timer recording period, the ● button on deck 1 is released before the timer is off.
When the tape length is longer than the timer recording period, the ● button is not released. If the ● is not released for a long time, the tape in the deck may be damaged. Press the ■/⏏ button to release the ● button.

To cancel the timer standby mode temporarily
While pressing the SHIFT button, press the TIMER button so that ◴ goes out in the display.
To restore the timer standby mode, press these buttons again to display ◴.

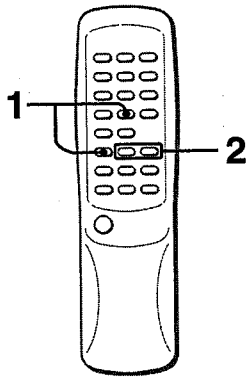
If using the unit after setting the timer
After setting the timer, you can use the unit. After using the unit, check whether the contents in step 5 are set as you wish, turn off the power and set step 7 if necessary.

To change the specified time and function
Repeat all the steps again.

To check the specified contents
While pressing the SHIFT button, press the TIMER button. The timer-on time, the selected source name and timer-activated period are displayed alternately for 4 seconds.

NOTE
- Timer playback and timer recording will not begin unless the power is turned off.
- Connected equipment cannot be turned on and off by the built-in timer of this unit. Use an external timer.

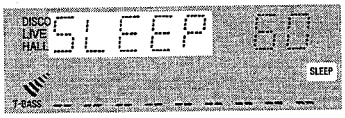
SETTING THE SLEEP TIMER



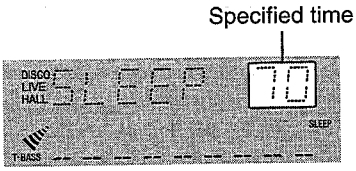
The unit can be turned off automatically at a specified time.

Use the remote control.

1 Press the SLEEP button while pressing the SHIFT button.



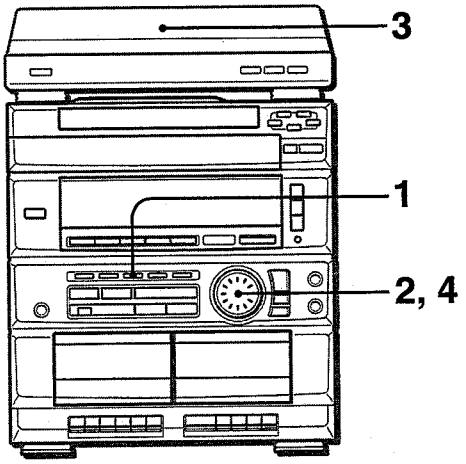
2 <u>Within 4 seconds</u>, press the ◄◄ or ►► button to specify the time until the power is turned off.
Each time the button is pressed, the time changes between 5 and 240 minutes in 5-minute steps.



To check the time remaining until the power is turned off
Press the SLEEP button once while pressing the SHIFT button. The remaining time is displayed for 4 seconds.

To cancel the sleep timer
Press the SLEEP button twice while pressing the SHIFT button so that "SLEEP" on the display disappears.

BASIC OPERATION



Preparation
- Connect the supplied stereo turntable to the main unit. (See page 3)
- Set the EQUALIZER AMP. selector on the turntable to ON position. (Refer to the operating instructions of the turntable for details.)

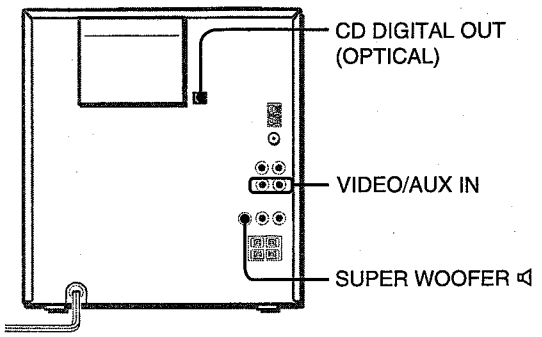
1 Press the PHONO button on the main unit.
PHONO appears on the display.

2 Adjust the volume to minimum.
Turn the VOLUME control counterclockwise until "VOL 0" is displayed.

3 Play the turntable.
Refer to the operating instructions of the turntable for details.

4 Adjust the volume according to your preference.

CONNECTING OPTIONAL EQUIPMENT



Refer to the operating instructions of the connected equipment for details.

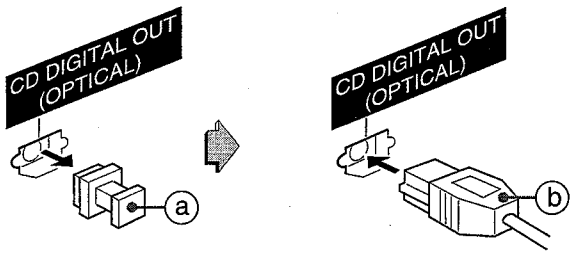
- The connecting cords are not supplied. Obtain the necessary connecting cords.
- Consult your local Aiwa dealer for optional equipment.

VIDEO/AUX IN JACKS

This unit can input analog sound signals through these jacks. Use a cable with RCA phono plugs to connect audio equipment (LD player, VCR, TV, etc.).
Connect the red plug to the R jack, and the white plug to the L jack.

CD DIGITAL OUT (OPTICAL) JACK

This unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment (digital amplifier, DAT deck, MD recorder, etc.).
Remove the dust cap ⓐ from the CD DIGITAL OUT (OPTICAL) jack. Then, connect an optical cable plug ⓑ to the CD DIGITAL OUT (OPTICAL) jack.

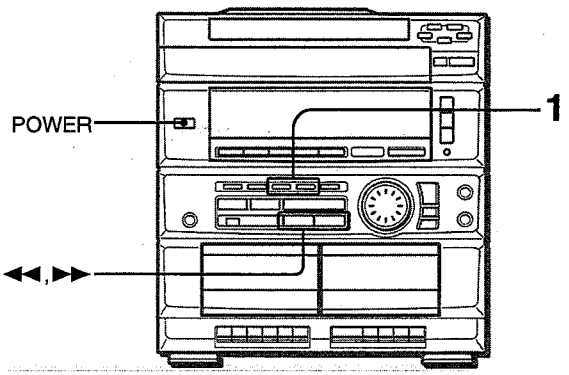


When the CD DIGITAL OUT (OPTICAL) jack is not being used
Attach the supplied dust cap.

SUPER WOOFER JACK

Connect an optional powered sub woofer with a built-in amplifier to the jack.

LISTENING TO EXTERNAL SOURCES



To play equipment connected to the PHONO IN or VIDEO/AUX IN jacks, proceed as follows.

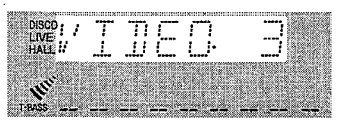
***1* Press the PHONO or VIDEO/AUX button.**
PHONO or VIDEO appears on the display.

***2* Play the connected equipment.**

To change a source name in the display
When the VIDEO/AUX button is pressed, VIDEO is displayed initially. It can be changed to AUX or TV.
With the power on, press the POWER button while pressing the VIDEO/AUX button.
Repeat the procedure until the desired name appears on the display.

To adjust the sound level of the external source connected to VIDEO/AUX IN jack.
When the sound level of the external source is much higher or lower than that of the other function sources, adjust it as follows.

1 Press the VIDEO/AUX button and play the equipment.
2 Press the ⏮DOWN or ⏭UP button to adjust the sound level which is closest to the other function sources.
MIN(minimum), 1 to 6 and MAX(maximum) can be selected.

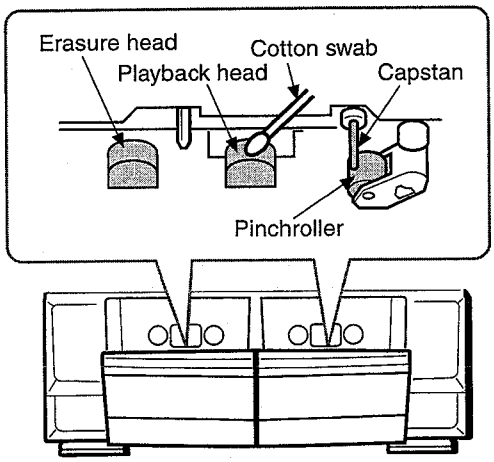


CARE AND MAINTENANCE

Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet
Use a soft and dry cloth.
If the surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents, such as alcohol, benzine or thinner as these could damage the finish of the unit.

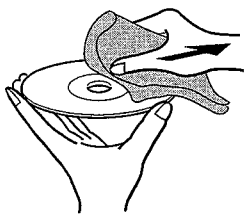
To clean the heads and tape paths
After every 10 hours of use, clean the heads and tape paths with a head cleaning cassette or cotton swab moistened with cleaning fluid or denatured alcohol. (These cleaning kits are commercially available.)
When cleaning with a cotton swab, wipe the recording/playback head, erasure head (deck 1 only), capstans, and pinchrollers.



After cleaning the heads and tape paths with a liquid head cleaning cassette or a moistened swab, wait until the cleaned parts are completely dry before inserting the tapes.

To demagnetize the heads
The heads may become magnetized after long-term use. This may narrow the output range of recorded tapes and increase noise. After 20 to 30 hours use, demagnetize the heads with any commercially available demagnetizer.

Care of discs
- When a disc becomes dirty, wipe the disc from the centre out with a cleaning cloth.



- After playing a disc, store the disc in its case. Do not leave the disc in places that are hot or humid.

Care of tapes
- Store tapes in their cases after use.
- Do not leave tapes near magnets, motors, television sets, or any source of magnetism. This will downgrade the sound quality and cause noise.
- Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

TROUBLESHOOTING GUIDE

If the unit fails to perform as described in these Operating Instructions, check the following guide.

GENERAL
There is no sound.
- Is the AC cord connected properly?
- Is there a bad connection? (→ page 3)
- There may be a short circuit in the speaker terminals.
  → Disconnect the AC cord, then correct the speaker connections.
- Was an incorrect function button pressed?

Sound is emitted from one speaker only.
- Is the other speaker disconnected?

The output sound is not stereo.
- Is Karaoke function turned on? (→ page 15)

An erroneous display or a malfunction occurs.
→ Reset the unit as stated below.

TUNER SECTION
There is constant, wave-like static.
- Is the antenna connected properly? (→ page 3)
- Is the signal weak?
  → Connect an outdoor antenna.

The reception contains noise interferences or the sound is distorted.
- Is the system picking up external noise or multipath distortion?
  → Change the orientation of the antenna.
  → Move the unit away from other electrical appliances.

CASSETTE DECK SECTION
The tape does not run.
- Is a deck in pause mode? (→ page 11)

The sound is off-balance or not adequately high.
- Is the playback head dirty? (→ page 20)

Recording is not possible.
- Is the erasure prevention tab on the tape broken off? (→ page 12)
- Is the recording head dirty? (→ page 20)

Erasure is not possible.
- Is the erasure head dirty? (→ page 20)
- Is a metal tape being used?

High frequency sound is not emitted.
- Is the recording/playback head dirty? (→ page 20)

CD PLAYER SECTION
The CD player does not play.
- Is the disc correctly inserted? (→ page 9)
- Is the disc dirty? (→ page 20)
- Is the lens affected by condensation?
  → Wait approximately one hour and try again.

To reset
If an unusual condition occurs in the display window or the cassette decks, reset the unit as follows.
1 Press the POWER button to turn off the power.
2 Press the POWER button while pressing the ■CLEAR button.
Everything stored in memory after purchase is cancelled.
If the power cannot be turned off in step 1 because of a malfunction, reset by disconnecting the AC cord and repeat step 2.

SPECIFICATIONS

Main unit CX-ZR500

FM tuner section

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity (IHF)	16.2 dBf
Antenna terminals	75 ohms (unbalanced)

MW tuner section

Tuning range	531 kHz to 1602 kHz (9 kHz step) 530 kHz to 1710 kHz (10 kHz step)
Usable sensitivity	350 µV/m
Antenna	Loop antenna

LW tuner section

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 µV/m
Antenna	Loop antenna

Amplifier section

Power output*	Rated: 40 W + 40 W (6 ohms, T.H.D. 1 %, 1 kHz/ DIN 45500) Reference: 50 W + 50 W (6 ohms, T.H.D. 10 %, 1 kHz/ DIN 45324) **without connecting to the SURROUND SPEAKERS.*
Total harmonic distortion	0.15 % (20 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX: 150 mV (adjustable) PHONO: 250 mV MIC 1, MIC 2: 1 mV (10 kohms) CD DIGITAL OUT (OPTICAL)
Outputs	SUPER WOOFER: 1.6 V SPEAKERS: accept speakers of 6 ohms or more SURROUND SPEAKERS: accecpt speakers of 16 ohms or more PHONES (stereo jack): accepts headphones of 32 ohms or more

Cassette deck section

Track format	4 tracks, 2 channels stereo
Frequency response	Type I (normal) tape: 50 Hz – 15000 Hz Type II (high/CrO_2) tape: 50 Hz – 16000 Hz
Signal-to-noise ratio	48 dB (high/CrO_2 tape)
Recording system	AC bias
Heads	Deck 1: Recording/playback head × 1 Erase head × 1 Deck 2: Playback head × 1

Compact disc player section

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.03 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

General

Power requirements	230 V AC, 50 Hz
Power consumption	105 W
Dimensions of main unit (W × H × D)	360 × 393 × 382 mm (14 1/4 × 15 1/2 × 15 1/8 in.)
Weight of main unit	9.1 kg (20 lbs 1 oz)

Speaker system SX-FZR500

Cabinet type	3 way, bass reflex with surround speaker
Speakers	Woofer: 220 mm (8 3/4 in.) cone type Tweeter: 80 mm (3 1/4 in.) cone type Super tweeter: 20 mm (13/16 in.) ceramic type Surround speaker: 80 mm (3 1/4 in.) cone type
Impedance	Front speaker: 6 ohms Surround speaker: 16 ohms
Output sound pressure level	90 dB/W/m
Dimensions (W × H × D)	270 × 444 × 265 mm (10 3/4 × 17 1/2 × 10 1/2 in.)
Weight	5.3 kg (11 lbs 11 oz)

Specifications and external appearance are subject to change without notice.

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